SECTION C – DESCRIPTION / SPECIFICATIONS / WORK STATEMENT

1.0 SCOPE OF WORK: The objective of this Performance Work Statement (PWS) is to describe NIMA's requirement for Mapping and Charting Services, Imagery Intelligence, Photogrammetric production services and resulting deliverables. NIMA may require these services to satisfy large or small regional areas (generation and/or maintenance of all geospatial data over a geographic region or production of discrete geospatial products). Various levels of security clearance, up to Top Secret SCI, may be required to satisfy requirements. This will be specified at the Task Order level.

1.1 DEFINITIONS

Most Highly Qualified Firm: A firm which has demonstrated exceptional competence in all factors for the proposed services. The firm's proposal demonstrates significant strengths; no significant weaknesses or risks; and provides increased value to the Government.

Subcontractor: Any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime contractor or another subcontractor.

Contractor Team Arrangements: "Contractor Team Arrangements" means an arrangement in which-

- (a) Two or more companies form a partnership or joint venture to act as a potential prime contractor: or
- (b) A potential prime contractor agrees with one or more other companies to have them act as its subcontractors under a specified Government contract or acquisition program. (See FAR Part 9.6)
- 2.0 REQUIREMENTS: The Contractor shall generally provide all personnel, materials, facilities and equipment required to perform the services listed below. NIMA anticipates that some of the production services will be conducted at Government facilities using Government-Furnished Equipment. As such, the need to provide all materials, facilities, and equipment for those services is not applicable at the contract level, though it may be a requirement in future Task Orders. Services required will be identified in the following functional areas: (1) Regional Area Services (2) Imagery Intelligence and Photogrammetric Production Services (3) Mapping and Charting Production Services and (4) Production Management and Production Control Services. Within each of these functional areas NIMA may require the development, prototyping and demonstration of new or improved production processes, management processes, geospatial and intelligence products, and data sets.
 - 2.1 Regional Area Services: This service stresses the collection, maintenance and integration of "information" concerning a region of the world. Regions can be defined as a country, a continent or other areas of the earth's surface with specified boundaries. The acquisition, management and storing of all materials (sources) required to perform this service, may be the responsibility of the Contractor as defined at the Task Order level. The level of readiness (completeness, accuracy and currency) must be such that NIMA standard and non-standard products can be derived/output from this information store. All services from functional areas 2.2, 2.3 and 2.4 may be required to support this functional area Regional Area Services.
 - 2.2 Imagery Intelligence and Photogrammetric Production Services: All resources required to analyze and produce intelligence information from space based and/or aerial imagery and collateral sources, and stereoscopic/monoscopic techniques to prepare, analyze, manipulate, measure, and extract information from imagery These services may include, but are not limited to:

- 2.2.1 Imagery Analysis: The extraction of information and intelligence from aerial or space based imagery and assessment of the meaning and significance of that information through an iterative analysis process. This process cycle includes imagery collection tasking, exploitation, reporting, and dissemination. The level and extent of analysis varies widely with the specific requirements, situation, timeliness of the information needed, and analyst performing the analysis. Imagery analysis employs a unique combination of inherent traits, skills, knowledge, experience, specialized tools, databases, equipment, and technical support. It also employs collaboration with other imagery analysts and customers, and relevant information from all available imagery and non-imagery sources. Reports on the resulting imagery derived information and intelligence can use a variety of formats, levels of detail, media, and response times based on the requirements. These variables will be specified at the Task Order level.
- 2.2.2 Imagery Analysis Production Support: Services required to support imagery analysts with electronic publishing and research, hardcopy and softcopy imagery distribution and archiving. Electronic publishing and research will require service in graphics, editing, photography, librarian, and information support. Hardcopy imagery distribution will require the distribution of film, maintaining film archives, and collating film and target folders. Softcopy imagery distribution will require the ordering and dissemination of digital imagery and storage.
- 2.2.3 Advanced Imagery Analytical Support: Services required to provide advanced imagery exploitation methodologies, statistical analysis, and tailored software applications support. The services will include the use of computer software programs and equipment to analyze, interpret, and present imagery derived quantitative data, develop software to maximize the utility of Unites States Imagery and Geospatial Information System, Commercial Off the Shelf, and Web based applications within the imagery analysis process through application management, modification, interfacing, and training.
- 2.2.4 Imagery Data Manipulation: The performance of those data processing operations common to most users, such as sorting, input/output operations, transformations (ie. data formatting for input into COTs solutions and Government solutions), conversions, generalization, integration, and report generations. Additional specialized functions include pixel manipulation and processing, spectral analysis, application of tools and techniques for measuring and enhancing imagery derived data.
- 2.2.5 <u>Aerotriangulation</u>: Services to generate dense photo control networks, for all photo sources, from a limited number of vertical and horizontal ground control points distributed sparsely throughout project areas. Different process types include analytical aerotriangulation, softcopy aerotriangulation, and airborne GPS controlled aerotriangulation.
- 2.2.6 Orthophotography: This service provides rectified photographic copies or images prepared from aerial or space based imagery. This includes removal of sensor specific projection distortions, corrections due to terrain relief displacements, edge enhancements, image enhancements, and the removal of all distortions due to film deformation. This service includes but is not limited to the production of orthophotos, orthoquads, Controlled Image Base (CIB).

- 2.2.7 <u>Stereo Image Geocoding and Compression:</u> Services to provide three dimensional solutions for stereo imagery derived from aerial or space based imagery. This includes image enhancements and edge enhancements. This process requires that the vendors become National Imagery Transmission Format Standards (NITFS) certified. The service includes but is not limited to the production and replication of Digital Point Positioning Data Base (DPPDB).
- 2.2.8 <u>Stereo/Monoscopic Feature Extraction</u>: The service includes extracting and compiling geospatial information as feature (point, line, or area) data from selected source materials, utilizing photogrammetric techniques to achieve an accurate cartographic representation of a specific area at a specific scale (or level of detail for digital data).
- 2.2.9 <u>Terrain Extraction:</u> This service includes the collection and/or manipulation of digital elevation models and formatting a matrix of terrain elevation values for ground positions. Grid spacing varies according to surface model accuracy requirements. This service will not be limited to uniform matrixes with regularly spaced horizontal intervals.
- 2.2.10 Quality Review Services: The process of evaluating deliverables for conformance to stated Task Order specifications and standards as defined at the Task Order level. A Task Order for Quality Review Services will be awarded to a contractor/team that is not performing the Task Order to be reviewed. Award of a Task Order for Quality Review Services does not in any way relieve the provider from performing their own internal quality assurance reviews.
- 2.3 Mapping and Charting Production Services: All resources required in the preparation, collection, transformation, and generation of aeronautical, topographic, hydrographic, cultural, and toponymic data. The contractor will not be required to use stereo analytical equipment in the performance of these services. The contractor shall have trained personnel and equipment to perform (1) surveys (2) monoscopic or cartographic compilation/revision leading toward the creation of feature oriented or theme oriented digital datasets, plot files, or finished graphic maps of various scales, map projections, and datums from a variety of source materials and/or (3) GIS Production Services. These services also include the evaluation and review of topographic, hydrographic or aeronautical data for their effect on the intended use of information. Source packages may include but are not limited to imagery (national, commercial satellite or airborne derived imagery), cartographic sources, both hardcopy and softcopy, and textual information provided as Government Furnished Information (GFI) or obtained from commodity providers, and geospatial information databases. The Contractor shall provide all services, materials, supplies, facilities, labor, and supervision necessary to complete and deliver to NIMA the required deliverables identified at the Task Order level. These services may include but are not limited to:
 - 2.3.1 Surveys: All resources required in making precise measurements for determining the relative positions of points on, above, or beneath the Earth's surface. This service includes Conventional and/or GPS Surveys, Astronomic Surveys, Hydrographic Surveys, and Bathymetric Surveys.
 - 2.3.2 <u>Compilation Services</u>: These services include selection, assembly, and graphic presentation of all relevant information required for the preparation of a map, chart, or text. Such information may be derived from many sources. These sources include, but are not limited to, other maps, charts, chart text, or geospatial database information using manual or automated processes.
 - **2.3.3** GIS Analysis/Maintenance/Generation. These services include all services required to acquire, store, manipulate, analyze, maintain, and display geospatial information in variety of formats.

- 2.3.4 Map Digitizing and Scanning: These services include all services required to convert, project, and transform hardcopy sources into raster and vector formats. 'Transforms' are defined as datum, ellipsoid, grid, and projection transformations from a local datum to WGS84 or from WGS84 to a local datum. The contractor shall provide services to employ scanning/vectorizing/digitizing techniques to capture location data.
- 2.3.5 Acquisition of Primary and Ancillary Data: These services include the ability to acquire materials for use in the geospatial information production processes. Data may include, but are not limited to: commercial satellite imagery, aerial photography, remote sensing data, maps, charts, transliteration of geonames, and textual data. These services include but are not limited to the ability to acquire data from commodity data providers.
- 2.3.6 Scene Visualization and Geospatial/Image Manipulation: The ability to take existing imagery and geospatial information/intelligence data and develop scene visualization models, graphics pertaining to decision models, and probability and statistical analysis modeling. Many of the tasks will require that contractors augment the NIMA in-house production processes.
- 2.3.7 <u>Mapping & Charting Quality Review Services</u>: The process of evaluating deliverables for conformance to stated Task Order specifications and standards as defined at the Task Order level. A Task Order for Quality Review Services will be awarded to a contractor/team that is not performing the Task Order to be reviewed. Award of a Task Order for Quality Review Services does not in any way relieve the provider from performing their own internal quality assurance reviews.
- 2.4 Production Management and Production Control Services: These services include budget analysis and maintenance, project management, production control, cost accounting, and general accounting services. These services have been typically governmental functions and options to augment these types of services are included herein. The performance of these duties most often will be performed at NIMA sites. Personnel assigned to these contracts will be required to sign appropriate Non-Disclosure Forms and contractors will be required to establish procedures (i.e. 'China Wall') to prohibit disclosure of NIMA sensitive information.
 - **2.4.1** <u>Program Management</u>: This service includes analysis of production capabilities; development of a production program, performance analysis, and resource tracking.
 - **2.4.2** <u>Production Control</u>: This service typically includes the management of all aspects of production tasks to insure optimum efficiency is maintained throughout the production process.
 - 2.4.3 <u>Budget Analysis and Maintenance</u>: This service includes analysis and preparation of the geospatial/intelligence budget. The budget includes contract dollars, production rates, production hours, and timelines. It is normally updated on a quarterly basis or as deemed necessary.
 - 2.4.4 <u>Cost Accounting</u>: This service includes preparation of standards and formulation of cost models and/or trend analysis to support Geospatial/Intelligence budget and operational requirements.
 - **2.4.5** General Accounting: Initialization, update, and maintenance of management information systems utilized in NIMA Geospatial/Intelligence production processes.

3.0 QUALITY ASSURANCE

Quality is an important element of this contract. Many task orders will require the production of a large number of data items with few if any errors tolerated. Achieving virtually error free production requires a conscientious and comprehensive quality program that consistently builds quality into the process. The Government must have full confidence in the quality of the deliverable to allow the Government to employ statistical sampling techniques to minimize delays in the deliverable acceptance process. Quality Control/Quality Assurance Deliverables shall meet standards and procedures that clearly demonstrate the quality assurance standards set forth in this contract and generally accepted practices in the commercial market place for the services being performed, as well as those special standards and specifications that comply with ANSI/ASQC Q9002 – 1994 (ISO-9002); and/or as set forth in individual Task Orders. The Government reserves the right to inspect all contractor processes and documentation to assess the contractor's compliance with and commitment to the basic Quality System. The ANSI/ASQC Standard Q9002-1994 can be purchased from:

American Society for Quality Control Standards Development 600 North Plankinton Ave. P.O. Box 3005 Milwaukee, WI 53203-3005 (414) 272-8575

4.0 Standards

NIMA may require specific standards. All standards will be specified at the Task Order level. Below is a list of known standards that may be required. Others may be added over the course of the contract effort.

- **4.1** Spatial Data Transfer standards (SDTS)
- **4.2** National Imagery Transmission Format Standards (NITFS)
- **4.3** Federal Geographic Data Committee (FGDC) Standards
- **4.4** IHO S-44 (International Hydrographic Organization Standards for Hydrographic Surveys)

5.0 Security Requirements

This Document is unclassified. However, Task Orders issued under this contract may require personnel and/or facility clearances at various levels (e.g., Secret, Top Secret, Sensitive Compartmented Information (SCI)) prior to the start of performance. Other Task Orders may require U.S. citizenship. Specific security clearance and citizenship requirements, as applicable, will be identified at the Task Order level.

6.0 Government Property

Government property may be furnished to Contractors for the performance of Task Orders. Accountability, responsibility, and security requirements for the property while the property is in the possession of the Contractor will be identified at the Task Order level and pursuant to the terms of the contract.

7.0 Travel Requirements

NIMA may require travel by industry representatives in supporting Task Order requirements. All travel requirements will be specified at the Task Order level.

8.0 Documentation

NIMA may require documentation for services such as: studies, analyses, and assessments. All documentation requirements will be specified at the Task Order level.

9.0 Contractor Responsibilities

The Contractor, whether as an individual firm, team, joint venture, or other entity, is not an agent, servant, or employee of the Government. As such, the Contractor, utilizing special knowledge and techniques possessed by and available to the Contractor, shall furnish all labor, equipment, facilities, services, and material (except as set forth hereinafter or to be furnished by the Government), to perform Task Orders under this contract. At this point in securing contract support, NIMA anticipates that nearly all Imagery Analysis Support Services will be conducted at Government facilities using Government-Furnished Equipment. As such, the need to provide all materials, facilities, and equipment for those services is not applicable at the contract level, though it may be a requirement in future Task Orders. Performance shall be in accordance with the Scope of Work outlined in this section.

10.0 Personnel Standard Level of Quality

The level of skills, education and experience qualifications of personnel proposed by the Contractor, provided such personnel meet or exceed any minimum requirements set forth herein, shall comprise the minimum standard for any personnel performing under the contract and by which the contractor shall be bound throughout the term of the contract.

11.0 Contractor Work Force Responsibility

The Contractor/Team is responsible for organizing, furnishing, maintaining, supervising, and directing a workforce which, within the provisions of this contract, is capable of effectively and efficiently performing the work set forth in this contract.

12.0 Key Personnel

- 12.1 The Contractor shall assign to perform this contract those persons whose resumes were submitted with its proposal and who are identified below or in the Contractor's proposal as key personnel. These personnel are pledged to be available should tasks be issued which require their expertise. No substitutions of these key personnel shall be made except in accordance with this clause.
- 12.2 The Contractor agrees that during the first 60 days after contract award, no personnel substitutions will be made unless necessitated by an individual's sudden illness, death, or termination of employment. In any of these events, the contractor shall promptly notify the Contracting Officer and provide the information required by paragraph (12.4) below on the proposed replacement for Government approval.
- **12.3** After the initial 60 day period, the Contractor must obtain Government approval of the substitution prior to removing the approved personnel from performance. All proposed substitutions/additions must be submitted, in writing, to the Contracting Officer at least 30 days (60 days if security clearances are involved) in advance of the proposed substitution and provide the information required by paragraph (12.4) below.

- 12.4 All requests for substitutions/additions must include a detailed explanation of the circumstances necessitating the proposed substitution or addition, a complete resume for the proposed substitute or addition (including skills, experience, education, training and security level). All proposed substitutions/additions must have qualifications that meet or exceed the qualifications of the person to be replaced.
- 12.5 The Contracting Officer or his authorized representatives will evaluate the request (s) and the Contracting Officer will notify the Contractor, in writing, of approval or disapproval. Non-response by the Contracting Officer will constitute a disapproval of the proposed replacement. Disapproval of the proposed individual(s) shall not provide grounds for nonperformance by the Contractor or form the basis of any claim for monies, delivery schedule extension, or any other equitable adjustment.
- **12.6** Disapproval (s) of replacement personnel shall not relieve the Contractor from complying with the requirements, including schedules, of this contract.
- **12.7** The personnel set forth below as proposed by the contractor, or identified in the contractor's proposal as key personnel, comprise the list of key personnel required to perform under this contract. The list may be modified in accordance with the above, to substitute or add personnel:

LABOR CATEGORY	NAME

13.0 Disclaimer Statement

The technical report (s) prepared by the Contractor pursuant to this contract shall include the following disclaimer. "The views, opinions, and findings contained in this report are those of the author (s) and should not be construed as an official Department of Defense position, policy, or decision, unless so designated by other official documentation."